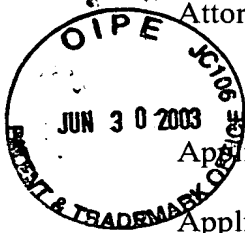


Application No. 09/685,297
Reply to USPTO Correspondence of March 5, 2003
Attorney Docket No. 3487-001146



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 09/685,297
Applicant : ROBERT B. CODY
Filed : October 10, 2000
Title : CHEMICAL ANALYSIS METHOD FOR MULTIPLEXED
SAMPLES
Group Art Unit : 1743
Examiner : Brian R. Gordon

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 CFR § 132

Sir:

I am the inventor of the above-captioned application. I performed the following experiments which demonstrate the usefulness of the method of claim 1 of the above-captioned application.

Three-Specimen Experiment

In this experiment, mixtures of nortriptylene, quinine, and thioridazine were analyzed using positive ion atmospheric pressure ionization. The specimens were dissolved in methanol and injected two at a time using a dual injector system into a tube connected to a commercial electrospray ionizing chamber from which ions pass to the mass spectrometer. The mass spectrometer was a JMS-LCmate sold commercially by JEOL Ltd. The spectra for the individual combinations of two specimens are shown in Figure 1.

Hadamard methods were used to solve for each individual spectrum as shown in Figure 2. The Hadamard deconvolution was simply implemented with a Microsoft Excel spreadsheet.

Seven-Specimen Experiment

In this experiment, the following seven specimens were dissolved in methanol mixed four at a time in vials and then analyzed: nortriptylene, quinine, thioridazine, acriflavine, chlorpromazine, promazine, and cinchonidine. The specimens were ionized by the electrospray atmospheric ionizer than comes standard with the JMS-700 mass spectrometer manufactured by JEOL Ltd. with which the mass/charge spectra were determined.

The spectrum for a mixture of four is shown in Figure 3.

Solution spectra using the Hadamard method for all seven specimens are shown in Figure 4. The solution spectra are also attached as Figures 5-11.

I am aware that willful false statements are punishable by fine or imprisonment or both (18 U.S.C. § 1001) and may jeopardize the validity of the application or any patent issuing thereon.

Date: June 17, 2003



Robert B. Cody, Ph.D.